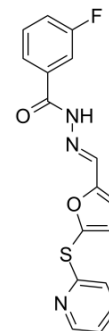


## MLS000544460

<b>Cat. No.:</b>	HY-133511		
<b>CAS No.:</b>	352336-36-8		
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>12</sub> FN <sub>3</sub> O <sub>2</sub> S		
<b>Molecular Weight:</b>	341.36		
<b>Target:</b>	Phosphatase		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 125 mg/mL (366.18 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.9295 mL	14.6473 mL	29.2946 mL
		5 mM	0.5859 mL	2.9295 mL	5.8589 mL
10 mM		0.2929 mL	1.4647 mL	2.9295 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (6.09 mM); Clear solution  2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (6.09 mM); Clear solution				

### BIOLOGICAL ACTIVITY

<b>Description</b>	MLS000544460 is a highly selective and reversible Eya2 phosphatase inhibitor with a K <sub>d</sub> of 2.0 μM and an IC <sub>50</sub> of 4 μM. MLS000544460 inhibit Eya2 phosphatase mediated cell migration and has anti-cancer activity <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Kd: 2.0 μM (Eya2 phosphatase) <sup>[1]</sup> IC50: 4 μM (Eya2 phosphatase) <sup>[1]</sup>
<b>In Vitro</b>	MLS000544460 does not bind Eya3 phosphatase (ED) <sup>[1]</sup> . MLS000544460 (10 μM) inhibits Eya2-mediated cell migration in human Eya2, Eya2 phosphatase-dead (D274N), and YFP (as a negative control) expressing MCF10A cells <sup>[1]</sup> . When Eya2 ED is dialyzed into 10 μM EDTA to remove Mg <sup>2+</sup> , it binds MLS000544460 with a higher affinity (K <sub>d</sub> =0.80 μM),

---

indicating that this class of compounds does not require  $Mg^{2+}$  for its interaction with the Eya2 ED<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

## REFERENCES

---

[1]. Krueger AB, et al. Allosteric inhibitors of the Eya2 phosphatase are selective and inhibit Eya2-mediated cellmigration. J Biol Chem. 2014 Jun 6;289(23):16349-61.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA